

Minor in Biophysics

Purpose:

Provides a well organized and structured program complementing a variety of baccalaureate programs. A minor in biophysics will be especially useful to students planning careers in biology, biotechnology, physics, mathematics, medicine, computer science and science education. Acquiring a minor in biophysics will enhance admission into graduate programs and improve employment opportunities. The Minor in Biophysics is flexible and is designed to provide students majoring in the natural sciences, or allied areas, with a choice of complementary course work leading to deeper knowledge and experience applying the principles of physics to various areas in biology.

Objectives:

Students completing a Minor in Biophysics will be exposed to concepts and techniques in general and modern physics, biochemistry, and biology or biotechnology. The minor is intended to provide students with increased and integrated breadth of exposure to topics in physics, modern physics, biology, biochemistry and chemistry, as well as to associated laboratory experience and techniques.

Prerequisites:

The Minor in Biophysics is open to all students in all academic programs that accommodate a minor. Some required courses have prerequisites and students will first need to fulfill those prerequisites.

Requirements:

1. Students must complete the prerequisites Biological Concepts L107 and the General Physics sequence, P201 and P202 with grade C or better to be admitted to the program.
2. Students must complete 24 credit hours in physics and biology or biotechnology, including the core courses listed below.
3. Students must obtain a grade of C in all courses used for the minor. The overall GPA must be at least 2.0 ("C").
4. Students must complete at least 9 hours of physics and biology above the 200 level. At least 10 hours of the minor must be completed on the IU East campus.
5. Students may be advised to take advanced courses in different areas of physics, biology, biotechnology, or biochemistry as such courses become available on the schedule.
6. Core Courses: 9 credit hours
 - Biol L315 - Cell Biology (4 cr)
 - Phys P300 - General Physics 3 (Modern Physics) (3 cr)
 - Phys P309 - Modern Physics Laboratory (2 cr)

Plus additional biology or biotechnology courses at the 200 level or above, to total 24 credit hours.

Administration: The full time physics, biology or chemistry faculty will serve as advisors for the Minor in Biophysics. Students planning to complete a minor in biophysics should obtain an application from their advisor. The form should be completed, signed by the minor advisor and put in the student's advising folder.

Assessment/evaluation:

Students will be assessed in the Minor in Biophysics program for their knowledge, quantitative abilities, scientific writing and communication skills based primarily on course grades. Students are encouraged to voluntarily maintain a portfolio of graded term papers, projects, or laboratory journals from their core and elective courses in the minor for their own personal and professional use. Students are also encouraged to voluntarily maintain records of evidence of any research or presentations relevant to their work in chemistry while completing the minor for their own personal or professional use.